



CITY OF CARDIFF.

---

# ANNUAL REPORT

FOR 1917

OF THE

## MEDICAL OFFICER OF HEALTH.

---

**EDWARD WALFORD, M.D., D.P.H., F.R.MET.SOC.,**

MEDICAL OFFICER OF HEALTH, CITY AND PORT OF CARDIFF;  
SCHOOL MEDICAL OFFICER, CARDIFF EDUCATION AUTHORITY.

---

Printed by Order of the Urban Sanitary Authority.

---

CARDIFF :

S. GLOSSOP AND SONS, LTD., NEW STREET.

1918.

CITY OF CARDIFF.

---

HEALTH AND PORT SANITARY COMMITTEE.

---

*Lord Mayor :*

ALDERMAN WILLIAM ROBERTS, J.P.

*Chairman :*

ALDERMAN JAMES ROBINSON, L.R.C.S. AND L.R.C.P.I., J.P.

*Deputy-Chairman :*

ALDERMAN F. G. L. DAVIS.

COUNCILLOR R. J. SMITH, M.B., D.P.H., J.P.

„ J. STANFIELD, J.P.

„ A. J. A. STONE.

„ C. WALL.

„ J. J. E. BIGGS, M.R.C.S., L.R.C.P.,  
(Lond.).

„ W. JONES.

COUNCILLOR W. GREY.

„ G. F. WILLETT.

„ A. J. HOWELL.

„ G. N. W. THOMAS, M.B., CH.B. (Ed.).  
Barrister-at-Law.

„ H. C. PRICKETT.

„ C. W. MELHUISH.

# CITY OF CARDIFF.

---

## Medical Officer of Health's Department.

---

### *Medical Officer of Health :*

EDWARD WALFORD. M.D., D.P.H.

### *Assistant Medical Officers of Health :*

†A. F. BERNARD SHAW, M.D., D.P.H.

EMILIE C. CREASER, M.B., Ch.B., D.P.H.

### *Inspector of Nuisances :*

SAMUEL EVANS.\*

### *Assistant Inspectors of Nuisances :*

F. GLOVER\* (CHIEF ASSISTANT).

A. F. MALE\* (LODGING HOUSES).

T. W. WARREN\* (DISTRICT).

F. DAVEY (LODGING HOUSES).

J. W. HOLDEN\* (DISTRICT).

G. M. MCGREGOR\*|| (MEAT, OTHER FOODS, &C.).

W. FISHER\* (DISTRICT).

ROBT. CHANT\* (SHOPS AND WORKSHOPS).

J. STRANGE\* (DISTRICT).

†R. T. DAVIES\*|| (SHOPS AND WORKSHOPS).

W. JAMES\*|| (DISTRICT).

W. G. JONES\* (SHOPS AND WORKSHOPS).

†J. T. W. ROWLES\*|| (DISTRICT).

A. E. RICHARDSON\* (SHOPS AND WORKSHOPS).

†P. F. NOOTE\* (SHOPS AND WORKSHOPS).

### *Veterinary Inspector and Chief Inspector of Meat :*

P. J. MULLANE, M.R.C.V.S.

### *Assistant Inspectors of Meat :*

†T. R. EVANS.\*||

†H. TATTERSALL.\*||

### *Infectious Disease Inspector :*

GEO. THOMAS.\*

### *Disinfectors :*

W. THOMAS.

W. WEBSTER.

### *Health Visitors :*

†LILLY HUNTLEY.‡

BESSIE H. KING.‡

G. M. KNAPP.‡

ESTHER M. HEALD.‡\*

WINIFRED JONES.‡\*

E. M. BISHOP.‡\*

RHODA REYNOLDS.‡

FRANCES EVANS.‡

CECILIA WILLIAMS.‡

E. M. LAVERICK.‡

### *Chief Clerk :*

†THOS. CHANT.\*

### *Clerks :*

†W. H. ALDERMAN.

†\*O. W. FUDGE.

†A. J. GLOVER.\*

†A. E. BRAIN.

\* Cert. Royal San. Inst.

‡ Cert. Health Visitor and School Nurse Royal San. Inst.

|| Cert. Meat Insp. Royal San. Inst

† On Military Service.

# CONTENTS.

---

|  | PAGE  |
|--|-------|
| Health and Port Sanitary Committee ... ..                          | 2     |
| Staff of Medical Officer of Health's Department ... ..             | 3     |
| Summary of Vital Statistics ... ..                                 | 6-7   |
| Marriages ... ..   | 8     |
| Births ... ..  | 8-9   |
| Deaths ... ..  | 9-10  |
| Analysis of Births and Deaths ... ..                               | 11    |
| Infectious Diseases ... ..   | 12-13 |
| Measles ... ..   | 13    |
| Scarlet Fever ... ..   | 14    |
| Diphtheria and Membranous Croup ... ..                             | 14-15 |
| Enteric Fever ... ..   | 15    |
| Cardiff Sanatorium ... ..  | 16    |
| Tuberculosis ... ..  | 17-23 |
| Cerebro-Spinal Meningitis ... ..                                   | 24    |
| Infant Mortality ... ..  | 23-24 |
| Notification of Births Act, and "Consultations" for Infants ... .. | 25    |
| Food Inspection ... ..   | 25-26 |
| Factory and Workshop Act ... ..                                    | 26-27 |
| Sanitary Inspection of District ... ..                             | 28-30 |

# CITY OF CARDIFF.

---

CITY HALL.

CARDIFF,

May, 1918.

*To the Right Honourable The Lord Mayor, Aldermen and Members of the City Council  
of Cardiff.*

MY LORD MAYOR AND GENTLEMEN,

The Annual Report for 1917, which I have the honour of presenting to you, has been considerably reduced in volume. The conditions which rendered this reduction necessary in the case of the Report for 1916 unfortunately still continue. All the members of the permanent Staff of the Medical Officer of Health of military age and fit for Military Service have been called up for this service and in some cases their places have been temporarily filled, the result being that the routine work of the Department, especially the clerical work, has been carried on under difficulties. The Local Government Board have issued circular letters in which they suggest the omission of many details usually inserted in Annual Reports, and in which they state that, having regard to the necessity for strict economy in the use of paper and in demands on printing establishments, interim reports only should be made for the year 1917. In these circumstances this Report will contain only a brief account of the routine administrative work and an abbreviated statistical record.

The members of the Staff absent on Military duty comprise one of the Assistant Medical Officers, five Sanitary Inspectors, one Health Visitor, four Clerks, and Van Driver.

As a result a temporary re-arrangement of the duties of the remaining members of the Staff was necessitated, and temporary appointments of four Clerks were made.

TABLE I

The following Table gives the number of houses in each Municipal Ward in Cardiff, as shown by the enumeration made in Sept., 1917, by the Inspectors in the Department of the Medical Officer of Health :—

| Municipal Wards. | Dwelling houses, including Business Premises. |                                      |                |           | Lock-up Shops |         | Houses being Built. | Totals. |
|------------------|---|--------------------------------------|----------------|-----------|---------------|---------|---------------------|---------|
|                  | In-habited.                                   | Occupied for Business Purposes only. | Vacant Houses. |           | Occupied      | Vacant. |                     |         |
|                  |   |                                      | Number         | Per Cent. |               |         |                     |         |
| Central ... ..   | 1,818   | 384                                  | 23             | 1·2       | 298           | 19      | ...                 | 2,542   |
| South ... ..     | 1,606   | 212                                  | 7              | 0·4       | 28            | 5       | ...                 | 1,858   |
| Cathays ... ..   | 4,267   | 21                                   | 15             | 0·3       | 16            | 10      | ...                 | 4,329   |
| Adamsdown...     | 1,953   | 43                                   | 14             | 0·7       | 7             | 1       | ...                 | 2,018   |
| Riverside ... .. | 3,145   | 46                                   | 24             | 0·7       | 21            | 5       | ...                 | 3,241   |
| Canton ... ..    | 4,893   | 25                                   | 12             | 0·2       | 7             | 2       | ...                 | 4,939   |
| Grangetown ...   | 3,803   | 17                                   | 7              | 0·1       | 4             | 2       | ...                 | 3,833   |
| Roath ... ..     | 3,807   | 28                                   | 20             | 0·5       | 17            | 2       | 6                   | 3,880   |
| Park ... ..      | 4,657   | 75                                   | 12             | 0·2       | 23            | 3       | 1                   | 4,771   |
| Splott ... ..    | 3,223   | 24                                   | 5              | 0·1       | 5             | ...     | ...                 | 3,257   |
| TOTALS ..        | 33,172  | 875                                  | 139            | 0·4       | 426           | 49      | 7                   | 34,668  |

VITAL STATISTICS.—The statistics in this report are based upon the Registrar General's estimate of the civil population of Cardiff for the middle of the year 1917, *i.e.*, 180,341. The population of the City enumerated at the Census of April, 1911, amounted to 182,259, being an increase of 17,926 over the census of 1901 (164,333). The increase in the population of the whole City during the ten years ended 31st March, 1911, was at the rate of 10·9 per cent. The excess of births over deaths during this period was 25,031. The number of births amounted to 50,853, and the deaths to 25,822, but the actual increase in the population according to the census returns was 17,926, or a difference of 7,105. This would imply a considerable migration of population from the City to the adjoining districts during the period in question.

The following is a Summary of the Vital Statistics for the year 1917 :—

|                            |     |       |  |                                      |         |      |
|----------------------------|-----|-------|--|--------------------------------------|---------|------|
| Estimated Civil Population |     |       |  | ...                                  | 180,341 |      |
| Births ... ..              | ... | 3,635 |  | Birth-rate per 1,000                 | ...     | 18·5 |
| Deaths ... ..              | ... | 2,433 |  | Death-rate per 1,000                 | ...     | 13·4 |
| Deaths under 1 year        | ... | 360   |  | Deaths under 1 year per 1,000 births |         | 99   |



TABLE II.

Table showing the number of deaths and death-rates per 1,000 from Zymotic, Respiratory and Tuberculous Diseases during the year 1917, compared with the average annual death-rates from these diseases during the preceding ten years (1907-1916) :—

| Cause of Death                    | Number of Deaths | Death-rate per 1,000 | Death-rate per 1,000, 1906-1915 (average) |
|-----------------------------------|------------------|----------------------|---|
| Small-pox ... ..                  | ...              | ...                  | 0·002                                     |
| Measles ... ..                    | 14               | 0·07                 | 0·30                                      |
| Scarlet Fever ... ..              | 3                | 0·01                 | 0·06                                      |
| Diphtheria ... ..                 | 19               | 0·10                 | 0·16                                      |
| Enteric Fever ... ..              | 4                | 0·02                 | 0·03                                      |
| Whooping Cough ... ..             | 44               | 0·24                 | 0·22                                      |
| Respiratory Diseases ... ..       | 472              | 2·61                 | 2·13                                      |
| Pulmonary Tuberculosis ... ..     | 281              | 1·55                 | 1·22                                      |
| Other Tuberculous Diseases ... .. | 58               | 0·32                 | 0·42                                      |

TABLE III.

Deaths and death-rate per 1,000 births from Diarrhoea and Enteritis (under 2 years) :—

|   | Number of Deaths | Death-rate per 1,000 births | Death-rate per 1000 births, 1907-1916 (average) |
|---|------------------|-----------------------------|---|
| Diarrhoea and Enteritis (under 2 years) ... | 55               | 15·1                        | 23·8  |

TABLE IV.

Table showing the birth-rate and death-rate per 1,000 persons living, and rate of infant mortality in 1917, compared with the rates in 1916, the average rates for the ten years 1907-1916 in Cardiff, and the rates during the year 1917 in England and Wales and the 96 great towns :—

|                          | Period    | Birth-rate | Death-rate | Deaths under one year per 1,000 births |
|--------------------------|-----------|------------|------------|--|
| Cardiff ... ..           | 1917      | 18·5       | 13·4       | 99                                     |
| Cardiff ... ..           | 1916      | 23·6       | 13·7       | 89                                     |
| Cardiff ... ..           | 1907-1916 | 25·3       | 13·7       | 113                                    |
| England and Wales ... .. | 1917      | 17·8       | 14·4       | 97                                     |
| 96 Great Towns ... ..    | 1917      | 18·1       | 14·6       | 104                                    |

MARRIAGES.—The return of the number of marriages in the City of Cardiff during the years 1904–1917, with the rate of persons married per 1,000 of the population, is given below :—

TABLE V.

| YEAR. | MARRIAGES. | RATE OF PERSONS<br>MARRIED PER<br>1,000 living |
|-------|------------|--|
| 1904  | 1,563      | 17·7   |
| 1905  | 1,650      | 18·8   |
| 1906  | 1,769      | 19·2   |
| 1907  | 1,743      | 18·5   |
| 1908  | 1,759      | 18·3   |
| 1909  | 1,803      | 18·4   |
| 1910  | 1,728      | 17·3   |
| 1911  | 1,646      | 18·0   |
| 1912  | 1,938      | 20·9   |
| 1913  | 1,976      | 21·1   |
| 1914  | 2,225      | 23·6   |
| 1915  | 2,401      | 25·4   |
| 1916  | 1,825      | 19·7   |
| 1917  | 1,710      | 18·9   |

BIRTHS.—During the year 1917 the births registered in the City numbered 3,684 ; of these 1,909 were males and 1,775 were females. The nett number of births belonging to the City was 3,635 ; of these 1,885 were males, and 1,750 females. The number of births corresponded to an annual birth-rate of 18·5 per 1,000 persons living. During the ten years ended 1891, the birth-rate in Cardiff averaged 39·9 per 1,000, as compared with 25·3, the average rate during the years 1907–1916.

The following table gives the annual number of births and the birth-rates in Cardiff in periods since 1852, from which it will be seen that a considerable decline in this rate has taken place during recent years.

TABLE VI.

| Period.   | Number of Births. |     |       |         | Birth-rate per 1,000. |     |      |
|-----------|-------------------|-----|-------|---------|-----------------------|-----|------|
| 1852–1861 | ...               | ... | 1,144 | Average | ...                   | ... | 44·2 |
| 1862–1871 | ...               | ... | 1,364 |         | ...                   | ... | 37·7 |
| 1872–1881 | ...               | ... | 2,433 |         | ...                   | ... | 36·5 |
| 1882–1891 | ...               | ... | 4,166 |         | ...                   | ... | 39·9 |
| 1892–1901 | ...               | ... | 5,241 |         | ...                   | ... | 35·3 |
| 1902–1911 | ...               | ... | 5,049 |         | ...                   | ... | 28·9 |
| 1912      | ...               | ... | 4,597 | ...     | ...                   | ... | 24·9 |
| 1913      | ...               | ... | 4,900 | ...     | ...                   | ... | 26·2 |
| 1914      | ...               | ... | 4,783 | ...     | ...                   | ... | 25·3 |
| 1915      | ...               | ... | 4,645 | ...     | ...                   | ... | 24·6 |
| 1916      | ...               | ... | 4,375 | ...     | ...                   | ... | 23·6 |
| 1917      | ...               | ... | 3,635 | ...     | ...                   | ... | 18·5 |



TABLE VII.

Showing the number of legitimate and illegitimate births, male and female, in each municipal ward during the year 1917 :—

| Municipal War ds. | Legitimate. |         | Illegitimate. |          | Totals. |          | TOTALS. |
|-------------------|-------------|---------|---------------|----------|---------|----------|---------|
|                   | Males       | Females | Males         | Females. | Males.  | Females. |         |
| Central ... ..    | 103         | 89      | 4             | 9        | 107     | 98       | 205     |
| South ... ..      | 102         | 98      | 2             | 5        | 104     | 103      | 207     |
| Cathays ... ..    | 231         | 199     | 10            | 9        | 241     | 208      | 449     |
| Adamsdown ... ..  | 128         | 129     | 11            | 7        | 139     | 136      | 275     |
| Riverside ... ..  | 140         | 121     | 7             | 7        | 147     | 128      | 275     |
| Canton ... ..     | 253         | 241     | 11            | 14       | 264     | 255      | 519     |
| Grangetown ... .. | 277         | 274     | 6             | 6        | 283     | 280      | 563     |
| Roath ... ..      | 176         | 160     | 10            | 7        | 186     | 167      | 353     |
| Park ... ..       | 181         | 158     | 6             | 8        | 187     | 166      | 353     |
| Splott ... ..     | 224         | 208     | 3             | 1        | 227     | 209      | 436     |
| Totals ... ..     | 1,815       | 1,677   | 70            | 73       | 1,885   | 1,750    | 3,635   |

DEATHS.—The total number of deaths registered at all ages and from all causes in the City of Cardiff during the year 1917 amounted to 2,464, including non-residents who died within the district. If corrected by the subtraction of non-residents who died in public institutions in Cardiff, and by the addition of residents who died in institutions outside the City, the number is 2,433, corresponding to an annual death-rate of 13·4.

From Table VIII. it will be seen that a continuous decline in the death-rate has taken place since these rates were first recorded in 1852–1861, when the mean rate for the ten years reached 29·2 per 1,000.

The death-rate throughout the country as compared with that of Cardiff for the year 1917 is given below :—

|                   | Death-rate per<br>1,000 persons living. |     |     |      |
|-------------------|---|-----|-----|------|
| England and Wales | ...                                     | ... | ... | 14·4 |
| 96 Great Towns    | ...                                     | ... | ... | 14·6 |
| 148 Smaller Towns | ...                                     | ... | ... | 13·2 |
| CARDIFF           | ...                                     | ... | ... | 13·4 |

TABLE VIII.

The following table gives the vital statistics in periods since 1852, and shows the marked decline in the general death-rate, in the death-rate from zymotic diseases, and in the birth-rate in successive periods :—

| Years     | Population            | Births | Birth-rate<br>per<br>1,000 | Deaths | Death-rate<br>per<br>1,000 | Deaths<br>from<br>Zymotic<br>Diseases | Zymotic<br>Death-rate<br>per<br>1,000 |
|-----------|-----------------------|--------|----------------------------|--------|----------------------------|---------------------------------------|---------------------------------------|
| 1852—1861 | 25,889                | 1,144  | 44·2                       | 756    | 29·2                       | 222                                   | 8·58                                  |
| 1862—1871 | 36,152                | 1,364  | 37·7                       | 875    | 24·2                       | 167                                   | 4·62                                  |
| 1872—1881 | 66,639                | 2,433  | 36·5                       | 1,335  | 20·0                       | 218                                   | 3·27                                  |
| 1882—1891 | 104,420               | 4,166  | 39·9                       | 2,255  | 21·6                       | 347                                   | 3·32                                  |
| 1892—1901 | 148,606               | 5,241  | 35·3                       | 2,674  | 18·0                       | 355                                   | 2·39                                  |
| 1902—1911 | 174,490               | 5,049  | 28·9                       | 2,597  | 14·8                       | 286                                   | 1·63                                  |
| 1912 ...  | 184,633               | 4,597  | 24·9                       | 2,563  | 13·9                       | 362                                   | 1·96                                  |
| 1913 ...  | 186,554               | 4,900  | 26·2                       | 2,567  | 13·7                       | 258                                   | 1·38                                  |
| 1914 ...  | 188,495               | 4,783  | 25·3                       | 2,644  | 14·0                       | 314                                   | 1·66                                  |
| 1915 ...  | 188,495               | 4,645  | 24·6                       | 2,808  | 14·8                       | 233                                   | 1·23                                  |
| 1916 ...  | 184,900 (City-<br>II) | 4,375  | 23·6                       | 2,546  | 13·7                       | 171                                   | 0·92                                  |
| 1917 ...  | 180,341 (do.)         | 3,635  | 18·5                       | 2,433  | 13·4                       | 139                                   | 0·77                                  |

TABLE IX.

Showing the number of deaths and death-rates at various age periods during the last six years :—

| AGES.                    | Number of Deaths. |       |       |       |       |       | Death-rate per 1,000 persons living at each age group. |      |      |       |       |      |
|--------------------------|-------------------|-------|-------|-------|-------|-------|--|------|------|-------|-------|------|
|                          | 1912              | 1913  | 1914  | 1915  | 1916  | 1917  | 1912   | 1913 | 1914 | 1915  | 1916  | 1917 |
| Under 5 years            | 851               | 761   | 793   | 742   | 582   | 521   | 36·9   | 36·9 | 38·1 | 35·6  | 27·9  | 25·8 |
| 5 to 15 „                | 100               | 104   | 113   | 130   | 111   | 90    | 2·5  | 2·6  | 2·8  | 3·2   | 2·8   | 2·3  |
| 15 „ 25 „                | 127               | 134   | 132   | 142   | 153   | 174   | 3·5  | 3·7  | 3·6  | 3·9   | 4·2   | 4·9  |
| 25 „ 65 „                | 946               | 969   | 993   | 1,060 | 979   | 983   | 12·0   | 11·5 | 11·7 | 12·4  | 11·5  | 11·9 |
| 65 years and upwards ... | 539               | 599   | 613   | 734   | 721   | 665   | 99·9   | 84·2 | 85·1 | 101·9 | 100·1 | 95·5 |
| At all Ages ...          | 2,563             | 2,567 | 2,644 | 2,808 | 2,546 | 2,433 | 13·9   | 13·7 | 14·0 | 14·8  | 13·7  | 13·4 |

TABLE X.

Death-rates from all causes per 1,000 persons living in the several municipal wards, the highest rate in each year being underlined :—

|                              | 1908        | 1909        | 1910        | 1911        | 1912        | 1913        | 1914        | 1915        | 1916        | 1917        |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Cardiff (Whole District) ... | 14·3        | 14·2        | 13·0        | 14·1        | 13·9        | 13·7        | 14·0        | 14·8        | 13·7        | 13·4        |
| Roath Ward ...               | 10·7        | 11·3        | 11·9        | 13·0        | 12·8        | 9·5         | 10·4        | 12·5        | 11·1        | 9·6         |
| Park Ward ...                | 8·9         | 8·9         | 9·3         | 12·4        | 11·9        | 10·8        | 11·7        | 12·5        | 11·1        | 11·9        |
| Splott „ ...                 | 13·2        | 10·7        | 12·9        | 12·9        | 14·0        | 14·2        | 17·8        | 14·1        | 10·3        | 11·0        |
| Central „ ...                | 12·8        | 13·0        | <u>20·4</u> | <u>22·1</u> | <u>21·0</u> | 19·4        | <u>22·9</u> | <u>21·8</u> | 22·4        | 18·3        |
| South „ ...                  | 15·4        | 14·3        | <u>18·3</u> | <u>21·4</u> | <u>19·1</u> | <u>21·2</u> | <u>22·6</u> | 17·9        | <u>23·9</u> | <u>23·8</u> |
| Cathays „ ...                | 10·0        | 9·3         | 10·5        | 12·3        | 12·6        | <u>13·3</u> | 10·9        | 13·4        | <u>11·4</u> | 11·8        |
| Adamsdown Ward ...           | <u>15·7</u> | <u>17·2</u> | 14·9        | 16·3        | 16·3        | 16·6        | 15·7        | 18·0        | 16·9        | 13·8        |
| Riverside „ ...              | <u>10·7</u> | <u>10·8</u> | 13·6        | 12·6        | 10·6        | 12·1        | 11·5        | 13·9        | 12·8        | 12·3        |
| Canton „ ...                 | 10·3        | 10·0        | 10·7        | 12·7        | 12·9        | 12·0        | 12·9        | 12·8        | 10·8        | 10·8        |
| Grangetown „ ...             | 14·0        | 14·0        | 14·0        | 14·2        | 15·6        | 15·3        | 13·8        | 15·7        | 13·3        | 11·6        |

TABLE XI.—Analysis of Births and Deaths in the City of Cardiff, in Registration Sub-Districts, and in Municipal Wards, during the year 1917.

| LOCALITIES      | *Population<br>(Civil) | Area in Acres<br>(Land and Inland Water) | Persons per Acre | Births |            | Deaths |            | Deaths under<br>1 Year |                               | Seven<br>Principal<br>Zymotic Diseases | Principal Zymotic Diseases. |         |            |                  |            |                   |            |            |            |                  | Other<br>Tuberculous<br>Diseases. |      | Phthisis,<br>Pulmonary<br>Tuberculosis |      | Deaths<br>Respiratory<br>Diseases |      |            |        |            |      |      |      |      |
|-----------------|------------------------|--|------------------|--------|------------|--------|------------|------------------------|-------------------------------|--|-----------------------------|---------|------------|------------------|------------|-------------------|------------|------------|------------|------------------|-----------------------------------|------|--|------|-----------------------------------|------|------------|--------|------------|------|------|------|------|
|                 |                        |  |                  | Number | Birth-rate | Number | Death-rate | Number                 | Deaths per<br>1,000<br>Births |  | Small-pox                   | Measles |            | Scarlet<br>Fever |            | Whooping<br>Cough |            | Diphtheria |            | Typhoid<br>Fever |                                   |      |  |      |                                   |      | Diarrhoea  |        |            |      |      |      |      |
|                 |                        |  |                  |        |            |        |            |                        |                               |  |                             | Deaths  | Death-rate | Deaths           | Death-rate | Deaths            | Death-rate | Deaths     | Death-rate | Deaths           |                                   |      |  |      |                                   |      | Death-rate | Deaths | Death-rate |      |      |      |      |
|                 |                        |  |                  |        |            |        |            |                        |                               |  |                             |         |            |                  |            |                   |            |            |            |                  |                                   |      |  |      |                                   |      |            |        |            |      |      |      |      |
| City of Cardiff | 180,341                | 6,373                                    | 28               | 3,635  | 18.5       | 2,433  | 13.4       | 360                    | 99                            | 139                                    | 0.77                        | ...     | ...        | 14               | 0.07       | 3                 | 0.01       | 44         | 0.24       | 19               | 0.10                              | 4    | 0.02                                   | 55   | 0.30                              | 281  | 1.55       | 58     | 0.32       | 472  | 2.61 |      |      |
| East Cardiff    | ...                    | ...                                      | ...              | ...    | ...        | ...    | ...        | ...                    | ...                           | ...                                    | ...                         | ...     | ...        | 1                | 0.04       | ...               | ...        | 2          | 0.08       | 1                | 0.04                              | ...  | ...                                    | ...  | 3                                 | 0.13 | 15         | 0.67   | 7          | 0.31 | 43   | 1.76 |      |
|                 | Roath Ward             | 22,282                                   | ...              | 353    | 15.8       | 215    | 9.6        | 31                     | 87                            | 7                                      | 0.31                        | ...     | ...        | 3                | 0.12       | 1                 | 0.04       | 4          | 0.16       | 3                | 0.12                              | ...  | ...                                    | 6    | 0.24                              | 45   | 1.85       | 11     | 0.45       | 38   | 1.56 |      |      |
|                 | Park Ward              | 24,305                                   | ...              | 353    | 14.5       | 290    | 11.9       | 32                     | 90                            | 17                                     | 0.69                        | ...     | ...        | ...              | ...        | ...               | ...        | ...        | ...        | ...              | ...                               | ...  | ...                                    | 4    | 0.20                              | 28   | 1.41       | 6      | 0.30       | 48   | 2.43 |      |      |
| ...             | ...                    | ...                                      | ...              | 436    | 22.0       | 219    | 11.0       | 31                     | 71                            | 8                                      | 0.40                        | ...     | ...        | ...              | ...        | ...               | ...        | ...        | 1          | 0.05             | 3                                 | 0.15 | ...                                    | ...  | ...                               | ...  | ...        | ...    | ...        | ...  | ...  |      |      |
| East Cardiff    | ...                    | 481                                      | 137              | 1,142  | 17.2       | 724    | 10.9       | 94                     | 82                            | 32                                     | 0.48                        | ...     | ...        | 4                | 0.06       | 1                 | 0.01       | 7          | 0.10       | 7                | 0.10                              | ...  | ...                                    | 13   | 0.19                              | 88   | 1.32       | 24     | 0.36       | 129  | 1.94 |      |      |
| Central Cardiff | ...                    | ...                                      | ...              | ...    | ...        | ...    | ...        | ...                    | ...                           | ...                                    | ...                         | ...     | ...        | ...              | ...        | ...               | ...        | ...        | 3          | 0.27             | 1                                 | 0.09 | ...                                    | ...  | 4                                 | 0.36 | 25         | 2.26   | 4          | 0.36 | 40   | 3.62 |      |
|                 | Central Ward           | 11,043                                   | ...              | 211    | 19.1       | 203    | 18.3       | 26                     | 123                           | 8                                      | 0.72                        | ...     | ...        | ...              | ...        | ...               | ...        | ...        | 3          | 0.29             | 2                                 | 0.19 | 1                                      | 0.09 | 3                                 | 0.29 | 56         | 5.50   | 7          | 0.68 | 51   | 5.01 |      |
|                 | South Ward             | 10,168                                   | ...              | 211    | 20.7       | 242    | 23.8       | 32                     | 151                           | 9                                      | 0.88                        | ...     | ...        | ...              | ...        | ...               | ...        | ...        | 3          | 0.29             | 2                                 | 0.19 | 1                                      | 0.09 | 9                                 | 0.37 | 29         | 1.20   | 7          | 0.29 | 54   | 2.24 |      |
|                 | Cathays Ward           | 24,091                                   | ...              | 433    | 17.9       | 285    | 11.8       | 44                     | 101                           | 23                                     | 0.95                        | ...     | ...        | ...              | ...        | ...               | 1          | 0.04       | 10         | 0.41             | 3                                 | 0.12 | ...                                    | ...  | 6                                 | 0.44 | 21         | 1.56   | 5          | 0.37 | 33   | 2.46 |      |
| Adamsdown Ward  | 13,405                 | ...                                      | ...              | 281    | 20.9       | 186    | 13.8       | 30                     | 106                           | 12                                     | 0.89                        | ...     | ...        | 1                | 0.07       | ...               | ...        | 1          | 0.07       | 3                | 0.22                              | 3    | 0.22                                   | 1    | 0.07                              | 6    | 0.44       | 21     | 1.56       | 5    | 0.37 | 33   | 2.46 |
| Central Cardiff | ...                    | 3,832                                    | 15               | 1,136  | 19.3       | 916    | 15.6       | 132                    | 115                           | 52                                     | 0.88                        | ...     | ...        | 1                | 0.01       | 1                 | 0.01       | 17         | 0.28       | 9                | 0.15                              | 2    | 0.03                                   | 22   | 0.37                              | 131  | 2.23       | 23     | 0.39       | 178  | 3.03 |      |      |
| Riverside Ward  | ...                    | ...                                      | ...              | ...    | ...        | ...    | ...        | ...                    | ...                           | ...                                    | ...                         | ...     | ...        | 3                | 0.16       | ...               | ...        | 7          | 0.38       | 1                | 0.05                              | ...  | ...                                    | ...  | 1                                 | 0.05 | 15         | 0.81   | 1          | 0.05 | 45   | 2.44 |      |
|                 | ...                    | ...                                      | ...              | ...    | ...        | ...    | ...        | ...                    | ...                           | ...                                    | ...                         | ...     | ...        | 6                | 0.22       | ...               | ...        | 7          | 0.26       | ...              | ...                               | 1    | 0.03                                   | 6    | 0.22                              | 25   | 0.95       | ...    | ...        | 58   | 2.20 |      |      |
|                 | ...                    | ...                                      | ...              | ...    | ...        | ...    | ...        | ...                    | ...                           | ...                                    | ...                         | ...     | ...        | ...              | ...        | 1                 | 0.04       | 6          | 0.24       | 2                | 0.08                              | 1    | 0.04                                   | 13   | 0.53                              | 22   | 0.90       | 10     | 0.41       | 62   | 2.56 |      |      |
| West Cardiff    | ...                    | 2,060                                    | 33               | 1,357  | 19.7       | 793    | 11.5       | 134                    | 98                            | 55                                     | 0.79                        | ...     | ...        | 9                | 0.13       | 1                 | 0.01       | 20         | 0.29       | 3                | 0.04                              | 2    | 0.02                                   | 20   | 0.29                              | 62   | 0.90       | 11     | 0.15       | 165  | 2.39 |      |      |

\* The civil population of the whole city is that estimated by the Registrar-General, and the populations of the Registration Sub-districts and of the Municipal Wards are estimated on the basis of the number of inhabited houses in September, 1917.

INFECTIOUS DISEASES.—The 2,433 deaths from all causes included 139 from the principal infectious diseases. This number was equal to an inclusive death-rate from these diseases of 0·77 per 1,000 persons living, as compared with 0·92 the rate in 1916, and with 1·39 the average rate for the ten years 1907–1916.

The mortality from these diseases in Cardiff was distributed in each quarter of the year 1917 as follows :—

|                    | First<br>Quarter. | Second<br>Quarter. | Third<br>Quarter. | Fourth<br>Quarter. |
|--------------------|-------------------|--------------------|-------------------|--------------------|
| Measles ...        | —                 | 1                  | —                 | 13                 |
| Scarlet Fever ...  | 1                 | 1                  | 1                 | —                  |
| Diphtheria ...     | 7                 | 4                  | 3                 | 5                  |
| Enteric Fever ...  | 1                 | —                  | 2                 | 1                  |
| Whooping Cough ... | 12                | 23                 | 6                 | 3                  |
| Diarrhoea ...      | 13                | 8                  | 17                | 17                 |

In the Registration Sub-Districts, the mortality during 1917 from these diseases was as follows :—

|                  | No. of<br>Deaths. | Death-rate<br>per 1,000. |
|------------------|-------------------|--------------------------|
| East Cardiff ... | 32                | 0·48                     |
| Central „ ...    | 52                | 0·88                     |
| West „ ...       | 55                | 0·79                     |

TABLE XII.

Death-rates from Infectious Diseases per 1,000 persons living in Cardiff :—

|                    | 1901-1910 | 1911 | 1912 | 1913 | 1914 | 1915 | 1916 | 1917 |
|--------------------|-----------|------|------|------|------|------|------|------|
| Small-pox ...      | 0·00      | 0·00 | 0·00 | 0·00 | 0·00 | 0·00 | 0·01 | 0·00 |
| Measles ...        | 0·34      | 0·03 | 1·09 | 0·05 | 0·32 | 0·19 | 0·10 | 0·07 |
| Scarlet Fever ...  | 0·10      | 0·08 | 0·04 | 0·09 | 0·10 | 0·05 | 0·03 | 0·01 |
| Diphtheria ...     | 0·20      | 0·20 | 0·17 | 0·22 | 0·22 | 0·23 | 0·18 | 0·10 |
| Whooping Cough ... | 0·31      | 0·29 | 0·29 | 0·09 | 0·38 | 0·18 | 0·15 | 0·24 |
| Enteric Fever ...  | 0·05      | 0·03 | 0·08 | 0·03 | 0·06 | 0·01 | 0·02 | 0·02 |
| Diarrhoea ...      | 0·50      | 1·32 | 0·27 | 0·89 | 0·56 | 0·55 | 0·40 | 0·30 |



TABLE XIII.

The following table shows the number of cases of infectious disease notified in the City of Cardiff in each year since the adoption of the Infectious Disease (Notification) Act, 1889 :—

| Year. | Small-Pox. | Diphtheria<br>(including<br>Membranous<br>Group) | Scarlet<br>Fever. | Enteric<br>Fever. | Typhus<br>Fever. | Erysip-<br>elas. | Puerperal<br>Fever. | Continued<br>Fever. | Pulmo-<br>nary<br>Tubercu-<br>losis. | Other Forms<br>of<br>Tuberculosis. | Measles | Totals. |
|-------|------------|--|-------------------|-------------------|------------------|------------------|---------------------|---------------------|--------------------------------------|------------------------------------|---------|---------|
| 1890  | —          | 72   | 335               | 150               | —                | 45               | 4                   | 2                   | —                                    | —                                  | —       | 608     |
| 1891  | 9          | 70   | 658               | 130               | —                | 52               | 10                  | —                   | —                                    | —                                  | —       | 956     |
| 1892  | 5          | 164  | 1,851             | 118               | —                | 95               | 12                  | 3                   | —                                    | —                                  | —       | 2,248   |
| 1893  | 4          | 479  | 816               | 103               | 41               | 152              | 24                  | 2                   | —                                    | —                                  | —       | 1,621   |
| 1894  | 10         | 343  | 577               | 62                | 1                | 135              | 19                  | 3                   | —                                    | —                                  | —       | 1,150   |
| 1895  | 1          | 248  | 484               | 79                | —                | 132              | 17                  | 5                   | —                                    | —                                  | —       | 966     |
| 1896  | 45         | 306  | 874               | 74                | 1                | 134              | 21                  | 7                   | —                                    | —                                  | —       | 1,462   |
| 1897  | 7          | 516  | 758               | 117               | —                | 163              | 12                  | 7                   | —                                    | —                                  | —       | 1,580   |
| 1898  | —          | 960  | 332               | 80                | —                | 133              | 18                  | 6                   | —                                    | —                                  | —       | 1,529   |
| 1899  | —          | 640  | 184               | 94                | —                | 176              | 13                  | 8                   | —                                    | —                                  | —       | 1,115   |
| 1900  | 4          | 714  | 383               | 95                | 4                | 106              | 15                  | 5                   | —                                    | —                                  | —       | 1,326   |
| 1901  | 8          | 734  | 1,362             | 73                | —                | 152              | 16                  | 3                   | —                                    | —                                  | —       | 2,348   |
| 1902  | 2          | 701  | 1,433             | 69                | —                | 169              | 13                  | 7                   | —                                    | —                                  | —       | 2,394   |
| 1903  | 65         | 438  | 963               | 100               | 6                | 145              | 20                  | 5                   | —                                    | —                                  | —       | 1,742   |
| 1904  | 11         | 406  | 658               | 40                | —                | 112              | 12                  | 2                   | —                                    | —                                  | —       | 1,241   |
| 1905  | 24         | 327  | 362               | 39                | —                | 133              | 14                  | 3                   | —                                    | —                                  | —       | 902     |
| 1906  | 2          | 333  | 776               | 77                | —                | 117              | 17                  | 1                   | —                                    | —                                  | —       | 1,323   |
| 1907  | 16         | 304  | 950               | 62                | —                | 147              | 16                  | —                   | —                                    | —                                  | —       | 1,495   |
| 1908  | —          | 291  | 475               | 55                | —                | 167              | 15                  | 1                   | —                                    | —                                  | —       | 1,004   |
| 1909  | 2          | 283  | 616               | 46                | —                | 132              | 6                   | 2                   | —                                    | —                                  | —       | 1,087   |
| 1910  | 1          | 363  | 887               | 36                | —                | 137              | 8                   | —                   | 346                                  | —                                  | —       | 1,778   |
| 1911  | —          | 491  | 753               | 44                | —                | 127              | 8                   | —                   | 366                                  | —                                  | —       | 1,789   |
| 1912  | —          | 536  | 472               | 56                | —                | 170              | 11                  | —                   | 499                                  | —                                  | —       | 1,744   |
| 1913  | 3          | 558  | 902               | 27                | —                | 145              | 8                   | —                   | 520                                  | 166                                | —       | 2,329   |
| 1914  | 3          | 620  | 1,086             | 29                | —                | 125              | 11                  | —                   | 353                                  | 81                                 | —       | 2,308   |
| 1915  | —          | 469  | 751               | 20                | —                | 100              | 12                  | 1                   | 368                                  | 102                                | —       | 1,823   |
| 1916  | 51         | 384  | 478               | 26                | —                | 90               | 9                   | 1                   | 372                                  | 141                                | 1,799   | 3,350   |
| 1917  | —          | 266  | 248               | 13                | —                | 48               | 8                   | —                   | 349                                  | 110                                | 1,738   | 2,780   |

MEASLES.—Fourteen deaths were registered from Measles during the year, being equal to an annual death-rate of 0·07 per 1,000 persons living, as compared with 0·10 the rate in 1916, and with 0·30 the average rate in the years 1907–1916.

The notifications and mortality from this disease in Cardiff were distributed in each quarter of the year 1917 as follows :—

|               | No. of notifications. | No. of deaths. |
|---------------|-----------------------|----------------|
| First Quarter | 139                   | —              |
| Second „      | 414                   | 1              |
| Third „       | 67                    | —              |
| Fourth „      | 1,118                 | 13             |

SCARLET FEVER.—Three deaths were registered from scarlet fever during the year 1917, being equal to an annual death-rate of 0·01 per 1,000 persons living, as compared with 0·03 the rate in 1916, and with 0·06, the average rate in the ten years 1907–1916.

The mortality from scarlet fever throughout the country was as follows during the year 1917 :—

|                    |     |     |     |     |      |
|--------------------|-----|-----|-----|-----|------|
| England and Wales  | ... | ... | ... | ... | 0·02 |
| 96 Great Towns ... | ... | ... | ... | ... | 0·03 |
| 148 Smaller Towns  | ... | ... | ... | ... | 0·02 |
| Cardiff ...        | ... | ... | ... | ... | 0·01 |

The number of cases of scarlet fever notified during the year amounted to 248, as compared with 478, the number notified in the previous year. The sickness-rate, or rate of notified cases per 1,000 of the population, amounted to 1·37.

The number of cases of scarlet fever notified during each quarter of the year in the three registration sub-districts were as follows :—

| Registration Sub-Districts. | First Quarter. | Second Quarter. | Third Quarter. | Fourth Quarter. | Totals. |
|-----------------------------|----------------|-----------------|----------------|-----------------|---------|
| East Cardiff ...            | 19             | 8               | 14             | 30              | 71      |
| Central „ ...               | 14             | 20              | 11             | 28              | 73      |
| West „ ...                  | 29             | 15              | 26             | 34              | 104     |

The age periods of persons notified to be suffering from scarlet fever and the percentage proportion of deaths to cases notified in each age period were as follows :—

| Ages.          | No. of Cases Notified. | Deaths. | Mortality per cent. |
|----------------|------------------------|---------|---------------------|
| 0– 1 year ...  | 1                      | —       | —                   |
| 1– 5 years ... | 51                     | 2       | 3·9                 |
| 5–15 „ ...     | 169                    | 1       | 0·5                 |
| 15–25 „ ...    | 19                     | —       | —                   |
| 25–65 „ ...    | 8                      | —       | —                   |

DIPHTHERIA AND MEMBRANOUS CROUP.—Nineteen deaths were registered from these diseases during the year, corresponding to an annual death-rate of 0·10 per 1,000 persons living, as compared with 0·18, the rate in 1916, and with 0·16, the rate in the ten years 1907–1916.

The mortality from diphtheria throughout the country was as follows during the year 1917 :  
Death-rate per 1,000.

|                       |     |     |     |     |      |
|-----------------------|-----|-----|-----|-----|------|
| England and Wales     | ... | ... | ... | ... | 0·13 |
| 96 Great Towns ...    | ... | ... | ... | ... | 0·13 |
| 148 Smaller Towns ... | ... | ... | ... | ... | 0·13 |
| CARDIFF               | ... | ... | ... | ... | 0·10 |

The number of cases of diphtheria and membranous croup notified during the year amounted to 266, as compared with 384 in 1916. The fatality, or proportion of deaths to cases notified, was 7·1 per cent. Of the cases notified, 213, or 80·0 per cent., were removed to the Cardiff Isolation Hospital.

Number and distribution of cases of diphtheria notified during each quarter of the year 1917 :—

| Registration Sub-Districts. | First Quarter. | Second Quarter. | Third Quarter. | Fourth Quarter. | Totals. |
|-----------------------------|----------------|-----------------|----------------|-----------------|---------|
| East Cardiff ...            | 29             | 24              | 34             | 23              | 110     |
| Central „ ...               | 27             | 21              | 16             | 13              | 77      |
| West „ ...                  | 29             | 11              | 14             | 25              | 79      |



The number of notifications and the rate of fatality at various age periods during 1917, are shewn below :—

| Ages.                    | Cases notified. | Deaths. | Mortality per cent of cases notified. |
|--------------------------|-----------------|---------|---------------------------------------|
| 0- 1 year ...            | 2               | —       | —                                     |
| 1- 5 years               | 80              | 14      | 17·5                                  |
| 5-15 „ ...               | 145             | 5       | 3·4                                   |
| 15-25 „ ...              | 24              | —       | —                                     |
| 25 years and upwards ... | 15              | —       | —                                     |

During the year swabs were sent to the Cardiff and County Public Health Laboratory from the throats of 212 cases suspected to be diphtheria, the bacteriological examination giving positive results in 54 cases, and negative results in 158.

ENTERIC FEVER.—The number of deaths registered from enteric fever during the year amounted to 4, being equivalent to an annual death rate of 0·02 per 1,000 persons living, as compared with 0·02 in the year 1916, and with 0·04 the average death-rate in the ten years 1907-1916.

The mortality from this disease in the year 1917 throughout the country was as follows :—

|                   | Death-rate per 1,000. |
|-------------------|-----------------------|
| England and Wales | 0·03                  |
| 96 Great Towns    | 0·02                  |
| 148 Smaller Towns | 0·03                  |
| CARDIFF           | 0·02                  |

The number of cases of enteric fever notified during 1917 was 13 ; of these 9, or 69·2 per cent., were removed to the Cardiff Isolation Hospital.

The following table shows the death-rates per 1,000 from enteric fever in periods since the year 1881 in Cardiff :—

| 1881-1890 | 1891-1900 | 1901-1910 | 1911 | 1912 | 1913 | 1914 | 1915 | 1916 | 1917 |
|-----------|-----------|-----------|------|------|------|------|------|------|------|
| 0·33      | 0·14      | 0·05      | 0·03 | 0·08 | 0·03 | 0·06 | 0·01 | 0·02 | 0·02 |

## CARDIFF SANATORIUM.

Report of the Medical Superintendent for the year 1917.

|  | 0 to 5<br>years. | 5 to 15<br>years. | 15 to 25<br>years. | 25 to 35<br>years. | 35 to 45<br>years. | 45 to 55<br>years. | 55 to 65<br>years. | Totals. |
|--|------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------|
| Remaining in Hospital 30th Dec., 1916 :— |                  |                   |                    |                    |                    |                    |                    |         |
| Scarlet Fever ... ..                     | 15               | 19                | 3                  | 1                  | ...                | ...                | ...                | 38      |
| Diphtheria ... ..                        | 10               | 15                | 1                  | 3                  | 1                  | ...                | ...                | 30      |
| Enteric Fever ... ..                     | ...              | ...               | 4                  | ...                | 1                  | ...                | ...                | 5       |
| Totals ... ..                            | 25               | 34                | 8                  | 4                  | 2                  | ...                | ...                | 73      |
| Admitted during the year 1917 :—         |                  |                   |                    |                    |                    |                    |                    |         |
| Scarlet Fever ... ..                     | 41               | 150               | 24                 | 7                  | 2                  | ...                | ...                | 224     |
| Diphtheria ... ..                        | 63               | 120               | 34                 | 10                 | 2                  | ...                | 1                  | 230     |
| Enteric Fever ... ..                     | ...              | 1                 | 3                  | 3                  | 8                  | ...                | ...                | 15      |
| Other Diseases ... ..                    | ...              | ...               | 21                 | 12                 | 5                  | 1                  | 1                  | 40      |
| Totals ... ..                            | 104              | 271               | 82                 | 32                 | 17                 | 1                  | 2                  | 509     |
| Totals under treatment in 1917 ...       | 129              | 305               | 90                 | 36                 | 19                 | 1                  | 2                  | 582     |
| Of the above there were discharged :—    |                  |                   |                    |                    |                    |                    |                    |         |
| (a) Recovered :—                         |                  |                   |                    |                    |                    |                    |                    |         |
| Scarlet Fever ... ..                     | 46               | 130               | 22                 | 8                  | 2                  | ...                | ...                | 208     |
| Diphtheria ... ..                        | 58               | 121               | 32                 | 11                 | 3                  | ...                | 1                  | 226     |
| Enteric Fever ... ..                     | ...              | 1                 | 5                  | 2                  | 8                  | ...                | ...                | 16      |
| Other Diseases ... ..                    | ...              | ...               | 20                 | 12                 | 3                  | 1                  | 1                  | 37      |
| Totals ... ..                            | 104              | 252               | 79                 | 33                 | 16                 | 1                  | 2                  | 487     |
| (b) Died :—                              |                  |                   |                    |                    |                    |                    |                    |         |
| Scarlet Fever ... ..                     | 2                | ...               | ...                | ...                | ...                | ...                | ...                | 2       |
| Diphtheria ... ..                        | 7                | 4                 | ...                | ...                | ...                | ...                | ...                | 11      |
| Enteric Fever ... ..                     | ...              | ...               | 1                  | 1                  | 1                  | ...                | ...                | 3       |
| Other Diseases ... ..                    | ...              | ...               | 1                  | ...                | 2                  | ...                | ...                | 3       |
| Totals ... ..                            | 9                | 4                 | 2                  | 1                  | 3                  | ...                | ...                | 19      |
| Remaining in Hospital 29th Dec., 1917 :— |                  |                   |                    |                    |                    |                    |                    |         |
| Scarlet Fever ... ..                     | 8                | 39                | 5                  | ...                | ...                | ...                | ...                | 52      |
| Diphtheria ... ..                        | 8                | 10                | 3                  | 2                  | ...                | ...                | ...                | 23      |
| Enteric Fever ... ..                     | ...              | ...               | 1                  | ...                | ...                | ...                | ...                | 1       |
| Totals ... ..                            | 16               | 49                | 9                  | 2                  | ...                | ...                | ...                | 76      |
| Totals under treatment in 1917 ...       | 129              | 305               | 90                 | 36                 | 19                 | 1                  | 2                  | 582     |

Mortality per cent. under treatment :—

|                      |      |                       |      |
|----------------------|------|-----------------------|------|
| Scarlet Fever ... .. | ·8   | Enteric Fever ... ..  | 15·0 |
| Diphtheria ... ..    | 4·23 | Other Diseases ... .. | 7·5  |

B. W. BROAD, M.B., *Medical Superintendent.*

TUBERCULOSIS.—The deaths from all forms of tuberculosis during the year 1917 amounted to 333, including 281 from pulmonary tuberculosis or phthisis. The mortality from phthisis was equal to an annual death-rate of 1.55 per 1,000, as compared with 1.27, the average rate in the ten years 1907–1916.

The mortality from phthisis and other forms of tuberculosis in Cardiff since the year 1880 is shown in the following table :—

TABLE XIV.

| Year. | Deaths from Phthisis. | Deaths from Other Forms of Tuberculosis. | Death-rate per 1,000 (Phthisis). | Year. | Deaths from Phthisis | Deaths from Other Forms of Tuberculosis. | Death-rate per 1,000 (Phthisis). |
|-------|-----------------------|--|----------------------------------|-------|----------------------|--|----------------------------------|
| 1880  | 177                   | 89                                       | 3.21                             | 1899  | 208                  | 119                                      | 1.32                             |
| 1881  | 176                   | 77                                       | 2.96                             | 1900  | 212                  | 110                                      | 1.25                             |
| 1882  | 187                   | 68                                       | 2.86                             | 1901  | 179                  | 122                                      | 1.05                             |
| 1883  | 186                   | 58                                       | 2.67                             | 1902  | 224                  | 98                                       | 1.34                             |
| 1884  | 223                   | 55                                       | 2.97                             | 1903  | 217                  | 93                                       | 1.28                             |
| 1885  | 241                   | 107                                      | 3.58                             | 1904  | 246                  | 98                                       | 1.44                             |
| 1886  | 214                   | 67                                       | 2.78                             | 1905  | 235                  | 103                                      | 1.36                             |
| 1887  | 210                   | 75                                       | 2.72                             | 1906  | 229                  | 95                                       | 1.31                             |
| 1888  | 211                   | 93                                       | 2.80                             | 1907  | 220                  | 91                                       | 1.25                             |
| 1889  | 224                   | 108                                      | 2.79                             | 1908  | 218                  | 94                                       | 1.22                             |
| 1890  | 231                   | 142                                      | 3.18                             | 1909  | 234                  | 74                                       | 1.30                             |
| 1891  | 239                   | 124                                      | 2.78                             | 1910  | 216                  | 88                                       | 1.19                             |
| 1892  | 242                   | 127                                      | 1.82                             | 1911  | 235                  | 81                                       | 1.28                             |
| 1893  | 230                   | 151                                      | 1.68                             | 1912  | 244                  | 64                                       | 1.32                             |
| 1894  | 227                   | 134                                      | 1.62                             | 1913  | 233                  | 69                                       | 1.24                             |
| 1895  | 242                   | 127                                      | 1.67                             | 1914  | 230                  | 63                                       | 1.22                             |
| 1896  | 203                   | 114                                      | 1.38                             | 1915  | 252                  | 96                                       | 1.33                             |
| 1897  | 206                   | 131                                      | 1.99                             | 1916  | 255                  | 91                                       | 1.37                             |
| 1898  | 203                   | 117                                      | 1.32                             | 1917  | 281                  | 58                                       | 1.55                             |

TABLE XV.

Death-rates from Phthisis per 1,000 persons living in the several Municipal Wards :—

|              | 1906 | 1907 | 1908 | 1909 | 1910 | 1911 | 1912 | 1913 | 1914 | 1915 | 1916 | 1917 |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| CARDIFF ...  | 1.31 | 1.25 | 1.22 | 1.30 | 1.19 | 1.28 | 1.32 | 1.24 | 1.22 | 1.33 | 1.37 | 1.55 |
| Roath Ward   | 0.74 | 0.72 | 0.71 | 0.96 | 1.18 | 1.11 | 0.83 | 0.80 | 0.49 | 0.90 | 0.72 | 0.67 |
| Park „       | 0.69 | 0.79 | 0.82 | 0.95 | 0.92 | 1.24 | 0.99 | 0.57 | 1.03 | 1.15 | 1.36 | 1.85 |
| Sploott „    | 1.12 | 0.59 | 0.81 | 0.69 | 0.76 | 1.19 | 1.09 | 0.86 | 1.11 | 1.07 | 1.10 | 1.41 |
| Central „    | 1.23 | 0.62 | 1.22 | 0.81 | 1.77 | 3.44 | 2.64 | 3.04 | 2.35 | 2.89 | 3.75 | 2.26 |
| South „      | 1.15 | 1.54 | 1.53 | 1.40 | 2.50 | 2.86 | 2.57 | 2.93 | 3.44 | 1.47 | 2.85 | 5.50 |
| Cathays „    | 0.67 | 0.75 | 1.04 | 0.72 | 1.02 | 0.86 | 1.22 | 1.28 | 0.87 | 0.96 | 1.24 | 1.20 |
| Adamsdown „  | 1.96 | 1.59 | 1.09 | 1.42 | 1.24 | 1.21 | 1.50 | 1.10 | 1.04 | 1.56 | 1.40 | 1.56 |
| Riverside „  | 0.94 | 1.00 | 1.48 | 0.60 | 1.27 | 0.80 | 1.35 | 1.26 | 1.03 | 1.03 | 0.81 | 0.81 |
| Canton „     | 0.78 | 1.02 | 0.76 | 0.98 | 1.05 | 1.04 | 1.17 | 1.29 | 1.35 | 1.14 | 0.69 | 0.95 |
| Grangetown „ | 1.34 | 1.10 | 0.90 | 1.09 | 1.08 | 0.90 | 1.25 | 1.01 | 1.07 | 1.77 | 1.36 | 0.90 |

The 339 deaths from tuberculosis during the year 1917 includes therefore 29 in Glan Ely and other Hospitals, 1 in a Sanatorium, 38 in the Cardiff Union Infirmary, and also 18 deaths of persons belonging to Cardiff who died elsewhere. The remaining 253 dying in their own homes in Cardiff.

TABLE XVI.

Deaths from Pulmonary Tuberculosis and Other Forms of Tuberculosis—age periods and sex :—

| Age Periods.   |     |     |     | Deaths from Tuberculosis. |         |        |                |         |        |
|----------------|-----|-----|-----|---------------------------|---------|--------|----------------|---------|--------|
|                |     |     |     | Pulmonary.                |         |        | Non-Pulmonary. |         |        |
|                |     |     |     | Males                     | Females | Totals | Males          | Females | Totals |
| Under 1 year   | ... | ... | ... | ...                       | ...     | ...    | 3              | 2       | 5      |
| 1 and under 5  | ... | ... | ... | 1                         | ...     | 1      | 7              | 7       | 14     |
| 5 „ „ 10       | ... | ... | ... | 1                         | 2       | 3      | 3              | 7       | 10     |
| 10 „ „ 15      | ... | ... | ... | 3                         | 12      | 15     | 5              | 3       | 8      |
| 15 „ „ 20      | ... | ... | ... | 8                         | 21      | 29     | 4              | 3       | 7      |
| 20 „ „ 25      | ... | ... | ... | 25                        | 27      | 52     | ...            | ...     | ...    |
| 25 „ „ 35      | ... | ... | ... | 34                        | 25      | 59     | 2              | 2       | 4      |
| 35 „ „ 45      | ... | ... | ... | 37                        | 19      | 56     | 4              | 1       | 5      |
| 45 „ „ 55      | ... | ... | ... | 30                        | 13      | 43     | 1              | 1       | 2      |
| 55 „ „ 65      | ... | ... | ... | 14                        | 3       | 17     | —              | —       | —      |
| 65 and upwards | ... | ... | ... | 4                         | 2       | 6      | 1              | 2       | 3      |
| Totals         | ... | ... | ... | 157                       | 124     | 281    | 30             | 28      | 58     |

TABLE XVII.

Deaths from Pulmonary Tuberculosis and Other Forms of Tuberculosis in Municipal Wards :—

|             |     |     |     | Deaths from Tuberculosis. |         |        |               |         |        |
|-------------|-----|-----|-----|---------------------------|---------|--------|---------------|---------|--------|
|             |     |     |     | Pulmonary                 |         |        | Non-Pulmonary |         |        |
|             |     |     |     | Males                     | Females | Totals | Males         | Females | Totals |
| Central ... | ... | ... | ... | 17                        | 8       | 25     | 2             | 2       | 4      |
| South ...   | ... | ... | ... | 42                        | 13      | 55     | 4             | 2       | 6      |
| Cathays...  | ... | ... | ... | 11                        | 19      | 30     | 4             | 3       | 7      |
| Adamsdown   | ... | ... | ... | 14                        | 7       | 21     | 3             | 2       | 5      |
| Riverside   | ... | ... | ... | 11                        | 5       | 16     | ...           | 1       | 1      |
| Canton ...  | ... | ... | ... | 11                        | 13      | 24     | ...           | ...     | ...    |
| Grangetown  | ... | ... | ... | 11                        | 11      | 22     | 6             | 5       | 11     |
| Roath ...   | ... | ... | ... | 8                         | 7       | 15     | 5             | 2       | 7      |
| Park ...    | ... | ... | ... | 19                        | 26      | 45     | 5             | 6       | 11     |
| Splott ...  | ... | ... | ... | 13                        | 15      | 28     | 1             | 5       | 6      |
| Totals      | ... | ... | ... | 157                       | 124     | 281    | 30            | 28      | 58     |

TABLE XVIII.

Notifications of cases of Pulmonary Tuberculosis and Other Forms of Tuberculosis—  
age periods and sex:—

| Age Periods.     |     |     | Notifications of Tuberculosis |         |        |               |         |        |
|------------------|-----|-----|-------------------------------|---------|--------|---------------|---------|--------|
|                  |     |     | Pulmonary                     |         |        | Non-Pulmonary |         |        |
|                  |     |     | Males                         | Females | Totals | Males         | Females | Totals |
| Under 1 year ... | ... | ... | ...                           | ...     | ...    | 1             | 1       | 2      |
| 1 and under 5    | ... | ... | ...                           | ...     | ...    | 11            | 5       | 16     |
| 5 " " 10         | ... | ... | 6                             | 6       | 12     | 8             | 16      | 24     |
| 10 " " 15        | ... | ... | 6                             | 14      | 20     | 12            | 13      | 25     |
| 15 " " 20        | ... | ... | 19                            | 31      | 50     | 10            | 6       | 16     |
| 20 " " 25        | ... | ... | 26                            | 28      | 54     | 4             | 5       | 9      |
| 25 " " 35        | ... | ... | 58                            | 25      | 83     | 3             | 7       | 10     |
| 35 " " 45        | ... | ... | 46                            | 16      | 62     | 2             | 3       | 5      |
| 45 " " 55        | ... | ... | 30                            | 10      | 40     | ...           | 2       | 2      |
| 55 " " 65        | ... | ... | 14                            | 4       | 18     | 1             | ...     | 1      |
| 65 and upwards   | ... | ... | 8                             | 2       | 10     | ...           | ...     | ...    |
| Totals           | ... | ... | 213                           | 136     | 349    | 52            | 58      | 110    |



TABLE XIX.

## PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1912.

Summary of Notifications during the year 1917.

| NOTIFICATIONS ON FORM A. |     |                        |           |            |             |             |             |             |             |             |             |                    |        |            |   |                        | NOTIFICATIONS ON FORM B. |        |    |  |                                   | NOTIFICATIONS ON FORM C. |  |  |  |
|--------------------------|-----|------------------------|-----------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------------|--------|------------|---|------------------------|--------------------------|--------|----|--|-----------------------------------|--------------------------|--|--|--|
|                          |     | Primary Notifications. |           |            |             |             |             |             |             |             |             |                    |        |            | Total Notifications<br>(i.e., including<br>cases previously<br>notified by other<br>doctors). | Primary Notifications. |                          |        |    | Total<br>Notifications<br>(i.e., including<br>cases previously<br>notified by<br>other doctors). | Poor<br>Law<br>Institu-<br>tions. | Sanato-<br>ria.          |  |  |  |
|                          |     | 0 to<br>1              | 1 to<br>5 | 5 to<br>10 | 10 to<br>15 | 15 to<br>20 | 20 to<br>25 | 25 to<br>35 | 35 to<br>45 | 45 to<br>55 | 55 to<br>65 | 65 & up-<br>wards. | Total. | Under<br>5 |   | 5 to<br>10             | 10 to<br>15              | Total. |    |  |                                   |                          |  |  |  |
|                          |     |                        |           |            |             |             |             |             |             |             |             |                    |        |            |   |                        |                          |        |    |  |                                   |                          |  |  |  |
| Pulmonary :—             |     |                        |           |            |             |             |             |             |             |             |             |                    |        |            |   |                        |                          |        |    |  |                                   |                          |  |  |  |
| Males ...                | ... | —                      | —         | 5          | 6           | 19          | 26          | 58          | 46          | 30          | 14          | 8                  | 212    | 286        | —   | 1                      | —                        | 1      | 1  | 21   | 134                               |                          |  |  |  |
| Females                  | ... | —                      | —         | 5          | 13          | 31          | 28          | 25          | 16          | 10          | 4           | 2                  | 134    | 208        | —   | 1                      | 1                        | 2      | 3  | 1  | 56                                |                          |  |  |  |
| Non-Pulmonary :—         |     |                        |           |            |             |             |             |             |             |             |             |                    |        |            |   |                        |                          |        |    |  |                                   |                          |  |  |  |
| Males ...                | ... | 1                      | 11        | 6          | 12          | 10          | 4           | 3           | 2           | —           | 1           | —                  | 50     | 65         | —   | 2                      | —                        | 2      | 2  | 1  | 14                                |                          |  |  |  |
| Females                  | ... | 1                      | 5         | 14         | 12          | 6           | 5           | 7           | 3           | 2           | —           | —                  | 55     | 67         | —   | 2                      | 1                        | 3      | 5  | 2  | 21                                |                          |  |  |  |
| Totals                   | ... | 2                      | 16        | 30         | 43          | 66          | 63          | 93          | 67          | 42          | 19          | 10                 | 451    | 626        | —   | 6                      | 2                        | 8      | 11 | 25   | 225                               |                          |  |  |  |



TABLE XX.

Notifications of cases of Pulmonary Tuberculosis and Other Forms of Tuberculosis in Municipal Wards :—

| Municipal Wards   | Notifications of Tuberculosis |         |        |               |         |        |
|-------------------|-------------------------------|---------|--------|---------------|---------|--------|
|                   | Pulmonary                     |         |        | Non-Pulmonary |         |        |
|                   | Males                         | Females | Totals | Males         | Females | Totals |
| Central ... ..    | 20                            | 10      | 30     | 3             | 3       | 6      |
| South ... ..      | 35                            | 11      | 46     | 3             | 1       | 4      |
| Cathays... ..     | 26                            | 16      | 42     | 7             | 12      | 19     |
| Adamsdown ... ..  | 15                            | 10      | 25     | 2             | 4       | 6      |
| Riverside ... ..  | 33                            | 8       | 41     | 4             | 4       | 8      |
| Canton ... ..     | 12                            | 17      | 29     | 3             | 1       | 4      |
| Grangetown ... .. | 12                            | 14      | 26     | 8             | 10      | 18     |
| Roath ... ..      | 12                            | 5       | 17     | 6             | 6       | 12     |
| Park ... ..       | 29                            | 27      | 56     | 9             | 9       | 18     |
| Splott ... ..     | 19                            | 18      | 37     | 7             | 8       | 15     |
| Totals ... ..     | 213                           | 136     | 349    | 52            | 58      | 110    |

TABLE XXI.

Cases of Tuberculosis visited by the Health Visitors—in Municipal Wards, and whether “insured” or “uninsured” persons, or “dependants.”

| Municipal Wards.  | Insured. |         | Dependants. |         | Uninsured. |         | Totals |
|-------------------|----------|---------|-------------|---------|------------|---------|--------|
|                   | Males    | Females | Males       | Females | Males      | Females |        |
| Central ... ..    | 10       | 1       | 1           | 6       | 7          | 4       | 29     |
| South ... ..      | 10       | 3       | 1           | 2       | 15         | 2       | 33     |
| Cathays ... ..    | 24       | 8       | 2           | 9       | 5          | 6       | 54     |
| Adamsdown ... ..  | 14       | 4       | 2           | 4       | 1          | 2       | 27     |
| Riverside ... ..  | 10       | 4       | 2           | 1       | 3          | ...     | 20     |
| Canton ... ..     | 10       | 10      | ...         | 3       | 1          | 5       | 29     |
| Grangetown ... .. | 15       | 2       | 2           | 10      | ...        | 5       | 34     |
| Roath ... ..      | 8        | 3       | 3           | 2       | 4          | 3       | 23     |
| Park ... ..       | 16       | 8       | 5           | 14      | 7          | 3       | 53     |
| Splott ... ..     | 15       | 8       | 7           | 10      | 3          | 6       | 49     |
| Totals ..         | 132      | 51      | 25          | 61      | 46         | 36      | 351    |

TABLE XXII.

Cases admitted to and discharged from Sanatoria and Hospitals according to notifications (Forms C. and D.) received under the Tuberculosis Regulations, 1912 :—

| Age Periods.          | Admitted. |         |        | Discharged. |         |        |
|-----------------------|-----------|---------|--------|-------------|---------|--------|
|                       | Males     | Females | Totals | Males       | Females | Totals |
| Under 1 year ... ..   | ...       | ...     | ...    | ...         | ...     | ...    |
| 1 and under 5 ... ..  | 2         | 1       | 3      | 3           | ...     | 3      |
| 5 " " 10 ... ..       | 2         | 7       | 9      | 11          | 4       | 15     |
| 10 " " 15 ... ..      | 4         | 12      | 16     | 3           | 9       | 12     |
| 15 " " 20 ... ..      | 17        | 13      | 30     | 13          | 14      | 27     |
| 20 " " 25 ... ..      | 25        | 11      | 36     | 18          | 13      | 31     |
| 25 " " 35 ... ..      | 58        | 20      | 78     | 52          | 7       | 59     |
| 35 " " 45 ... ..      | 29        | 12      | 41     | 21          | 3       | 24     |
| 45 " " 55 ... ..      | 26        | 2       | 28     | 12          | 2       | 14     |
| 55 " " 65 ... ..      | 8         | 3       | 11     | 8           | 2       | 10     |
| 65 and upwards ... .. | 1         | ...     | 1      | 1           | ...     | 1      |
| Totals ... ..         | 172       | 81      | 253    | 142         | 54      | 196    |

Applications to the Cardiff Insurance Committee to Sanatorium Benefit and form of treatment recommended by the Committee :—

|                               |     |     |     |     |     |     |
|-------------------------------|-----|-----|-----|-----|-----|-----|
| Applications ... ..           | ... | ... | ... | ... | ... | 169 |
| Form of Treatment :—          |     |     |     |     |     |     |
| Residential ... ..            | ... | ... | ... | ... | ... | 78  |
| Domiciliary ... ..            | ... | ... | ... | ... | ... | 89  |
| Institute (Dispensary) ... .. | ... | ... | ... | ... | ... | 42  |
| No treatment ... ..           | ... | ... | ... | ... | ... | 7   |

Many of the cases received more than one form of treatment ; the figures given above relate to the treatment recommended in all instances.

TABLE XXIII.

New cases of Tuberculosis (residents of Cardiff) examined at the Tuberculosis Institute (Welsh National Memorial Association) :—

| Age Periods           | Males | Females | Totals |
|-----------------------|-------|---------|--------|
| Under 1 year ... ..   | ...   | ...     | ...    |
| 1 and under 5 ... ..  | 5     | 2       | 7      |
| 5 " " 10 ... ..       | 6     | 12      | 18     |
| 10 " " 15 ... ..      | 12    | 18      | 30     |
| 15 " " 20 ... ..      | 23    | 29      | 52     |
| 20 " " 25 ... ..      | 20    | 27      | 47     |
| 25 " " 35 ... ..      | 48    | 23      | 71     |
| 35 " " 45 ... ..      | 29    | 11      | 40     |
| 45 " " 55 ... ..      | 22    | 5       | 27     |
| 55 " " 65 ... ..      | 7     | 2       | 9      |
| 65 and upwards ... .. | ...   | ...     | ...    |
| Totals ... ..         | 172   | 129     | 301    |

TABLE XXIV.

Distribution of Tuberculosis Institute cases in Municipal Wards and whether insured or uninsured persons :—

| Municipal Wards |     |     |     | Insured | Uninsured | Totals |
|-----------------|-----|-----|-----|---------|-----------|--------|
| Central         | ... | ... | ... | 11      | 8         | 19     |
| South           | ... | ... | ... | 7       | 17        | 24     |
| Cathays         | ... | ... | ... | 23      | 17        | 40     |
| Adamsdown       | ... | ... | ... | 19      | 10        | 29     |
| Riverside       | ... | ... | ... | 14      | 8         | 22     |
| Canton          | ... | ... | ... | 17      | 11        | 28     |
| Grangetown      | ... | ... | ... | 16      | 15        | 31     |
| Road            | ... | ... | ... | 7       | 10        | 17     |
| Park            | ... | ... | ... | 24      | 24        | 48     |
| Splott          | ... | ... | ... | 25      | 18        | 43     |
| Totals          | ... | ... | ... | 163     | 138       | 301    |

CEREBRO SPINAL MENINGITIS.—The number of cases notified during the year was three. Lumbar punctures were made whenever possible. The contacts were examined, and when necessary naso-pharyngeal swabs were taken for bacteriological examination.

INFANT MORTALITY.—The rate of infant mortality in Cardiff in the year 1917, calculated in the proportion of deaths under one year of age to 1,000 births registered, was at the rate of 99, compared with 89 in the year 1916, and with 113, the average rate for the ten years 1907–1916.

Rates of infant mortality throughout the country, as compared with that of Cardiff during 1917 :—

|                   |     |     |     |     |     | Deaths under 1 year<br>per 1,000 births. |
|-------------------|-----|-----|-----|-----|-----|--|
| England and Wales | ... | ... | ... | ... | ... | 97                                       |
| 96 Great Towns    | ... | ... | ... | ... | ... | 104                                      |
| 148 Smaller Towns | ... | ... | ... | ... | ..  | 93                                       |
| CARDIFF           | ... | ... | ... | ... | ... | 99                                       |

TABLE XXV.

The following table shows the rates of infant mortality in the several municipal wards, the highest rate in each year being underlined :—

|                          |     | Deaths under one year per 1,000 births. |      |            |            |            |            |            |            |            |            |
|--------------------------|-----|---|------|------------|------------|------------|------------|------------|------------|------------|------------|
|                          |     | 1908                                    | 1909 | 1910       | 1911       | 1912       | 1913       | 1914       | 1915       | 1916       | 1917       |
| Cardiff (Whole District) | ... | 124                                     | 103  | 111        | 135        | 110        | 115        | 109        | 106        | 89         | 99         |
| Roath Ward               | ... | 115                                     | 105  | 127        | 135        | 88         | 93         | 79         | 89         | 102        | 87         |
| Park                     | „   | 97                                      | 77   | 72         | 117        | 60         | 100        | 99         | 83         | 69         | 90         |
| Splott                   | „   | 130                                     | 84   | 109        | 152        | 93         | 111        | <u>160</u> | 73         | 80         | 71         |
| Central                  | „   | 135                                     | 96   | <u>179</u> | 160        | <u>199</u> | 136        | <u>113</u> | <u>155</u> | <u>212</u> | 123        |
| South                    | „   | <u>140</u>                              | 154  | <u>148</u> | <u>213</u> | <u>129</u> | 121        | 119        | <u>116</u> | <u>94</u>  | <u>151</u> |
| Cathays                  | „   | 99                                      | 78   | 105        | 120        | 107        | 125        | 90         | 124        | 83         | 101        |
| Adamsdown Ward           | ... | 114                                     | 160  | 125        | 117        | 126        | 129        | 140        | 132        | 122        | 106        |
| Riverside                | „   | 128                                     | 89   | 112        | 132        | 80         | 77         | 77         | 75         | 74         | 93         |
| Canton                   | „   | 127                                     | 101  | 94         | 120        | 115        | 107        | 100        | 95         | 51         | 80         |
| Grangetown               | „   | 133                                     | 110  | 114        | 132        | 142        | <u>143</u> | 117        | 139        | 100        | 115        |

TABLE XXVI.

The chief causes of death amongst infants under one year of age in Cardiff during the years 1908–1917 are shewn in the following table :—

| Cause of Death.          | Deaths under one year of age. |      |      |      |      |      |      |      |      |      |
|--------------------------|-------------------------------|------|------|------|------|------|------|------|------|------|
|                          | 1908                          | 1909 | 1910 | 1911 | 1912 | 1913 | 1914 | 1915 | 1916 | 1917 |
| Premature Birth          | 113                           | 89   | 96   | 97   | 91   | 115  | 99   | 95   | 65   | 68   |
| Diarrhoea and Enteritis  | 141                           | 77   | 77   | 201  | 44   | 125  | 88   | 88   | 63   | 44   |
| Pneumonia                | 46                            | 42   | 46   | 39   | 59   | 38   | 46   | 43   | 44   | 49   |
| Bronchitis               | 30                            | 33   | 46   | 26   | 53   | 40   | 31   | 33   | 21   | 48   |
| Whooping Cough           | 25                            | 30   | 11   | 32   | 22   | 9    | 39   | 21   | 15   | 19   |
| Tuberculosis (all forms) | 29                            | 22   | 24   | 25   | 15   | 20   | 18   | 23   | 18   | 5    |
| Atrophy and Debility     | 80                            | 61   | 63   | 57   | 60   | 73   | 63   | 58   | 51   | 40   |
| Convulsions              | 52                            | 55   | 44   | 41   | 31   | 42   | 39   | 26   | 31   | 14   |
| Measles                  | 2                             | 7    | 16   | 1    | 42   | 2    | 8    | 10   | 5    | 4    |
| Congenital Defects       | 18                            | 26   | 22   | 20   | 15   | 13   | 18   | 15   | 13   | 11   |

NOTIFICATION OF BIRTHS ACT, 1907.—This Act, which was adopted in 1908, provides for the notification to the Medical Officer of Health of every birth within the City by the father, if residing in the house where the birth takes place, and by any person in attendance upon the mother at the time of, or within six hours after, the birth. The notification must be given to the Medical Officer of Health within thirty-six hours after birth.

The following Table gives the number of births notified under this Act in each quarter of the year 1917, together with the number of still-births notified.

TABLE XXVII.

| 1917            | Births notified by Midwives | Births notified by Doctors or Parents | Duplicate Notifications received | Actual Number of Births notified | Still-births notified |
|-----------------|-----------------------------|---------------------------------------|----------------------------------|----------------------------------|-----------------------|
| 1st Quarter ... | 959                         | 32                                    | 14                               | 932                              | 45                    |
| 2nd „ ...       | 981                         | 26                                    | 11                               | 959                              | 37                    |
| 3rd „ ...       | 835                         | 32                                    | 8                                | 829                              | 30                    |
| 4th „ ...       | 820                         | 31                                    | 4                                | 816                              | 31                    |
| Totals ...      | 3,595                       | 121                                   | 37                               | 3,536                            | 143                   |

|  |     |     |       |
|--|-----|-----|-------|
| Births notified during the year 1917 ...   | ... | ... | 3,536 |
| Births registered during the year 1917 ... | ... | ... | 3,684 |

It will be seen that 96·0 per cent. of the births registered were notified.

#### FOOD INSPECTION :—

TABLE XXVIII.

Animals slaughtered at the Municipal Slaughter-houses during the year 1917 :—

|                     | Roath Abattoir | Canton Abattoir | Totals  |
|---------------------|----------------|-----------------|---------|
| Cattle ...          | 12,701         | 882             | 13,583  |
| Sheep and Lambs ... | 54,570         | 6,714           | 61,284  |
| Calves ...          | 8,043          | 211             | 8,254   |
| Pigs ...            | 18,034         | 2,053           | 20,087  |
| Totals ...          | 93,348         | 9,860           | 103,208 |



TABLE XXIX.

Unsound carcases of meat surrendered at Abattoirs and destroyed by arrangement with the owners :—

| Place                  | Carcases of |                 |      |      | Totals |
|------------------------|-------------|-----------------|------|------|--------|
|                        | Beef        | Mutton and Lamb | Veal | Pork |        |
| Roath Abattoir ... ..  | 113         | 66              | 15   | 38   | 232    |
| Canton Abattoir ... .. | 1           | 5               | ...  | 9    | 15     |
| Totals ... ..          | 114         | 71              | 15   | 47   | 247    |

**FACTORY AND WORKSHOP ACT, 1901.**—Under Section 132 of the Factory and Workshop Act, 1901, the Medical Officer of Health is required in his annual report to deal specifically with the administration of the Act (so far as the matters under the charge of the Sanitary Authority are concerned), and to send a copy of this report to the Secretary of State.

The Inspectors of Workshops made altogether 1,597 visits of inspection to factories, workshops, etc., during the year. 122 notices regarding nuisances or sanitary defects were served and 105 notices were complied with. Details of the work carried out under the Act are set forth in Tables XXX. to XXXI. in this Report.

TABLE XXX.

## 1.—INSPECTION OF FACTORIES, WORKSHOPS AND WORKPLACES.

| PREMISES.   | Number of    |                  |               |
|---|--------------|------------------|---------------|
|   | Inspections. | Written Notices. | Prosecutions. |
| Factories (including Factory Laundries) ... ..  | 331          | 10               | ...           |
| Workshops (including Workshop Laundries) ... ..                                       | 895          | 58               | ...           |
| Workplaces (other than Outworkers' premises included in Part 3 of this Report) ... .. | 371          | 54               | ...           |
| Total ... ..  | 1,597        | 122              | ...           |

## 2.—DEFECTS FOUND IN FACTORIES, WORKSHOPS AND WORKPLACES.

| PARTICULARS.   | Number of Defects              |          |
|--|--------------------------------|----------|
|  | Found.                         | Remedied |
| <b>Nuisances under the Public Health Acts :—</b>                               |                                |          |
| Want of cleanliness ... ..   | 37                             | 32       |
| Want of ventilation ... ..   | —                              | —        |
| Overcrowding ... ..  | —                              | —        |
| Other nuisances ... ..   | 51                             | 44       |
| Sanitary accommodation ... ..  | insufficient ... ..            | 8        |
|  | unsuitable or defective ... .. | 5        |
|  | not separate for sexes ... ..  | 11       |
| Breach of special sanitary requirements for bakehouses (Sec. 97 to 100) ... .. | 15                             | 13       |
| Total ... ..   | 127                            | 105      |



TABLE XXXI.—con.

## 3.—HOME WORK.

| NATURE OF WORK.            | OUTWORKERS' LISTS, SECTION 107. |              |           |                           |              |           |   | OUTWORK IN UNWHOLESOME PREMISES, SECTION 108. |                 | OUTWORK IN INFECTED PREMISES, SECTIONS 109, 110. |                       |
|----------------------------|---------------------------------|--------------|-----------|---------------------------|--------------|-----------|---|---|-----------------|--|-----------------------|
|                            | Lists received from Employers   |              |           |                           |              |           | Notices served on Occupiers as to keeping or sending lists. | Instan-ces.                                   | Notices served. | Instan-ces.                                      | Orders made (S. 110). |
|                            | Sending twice in the year.      |              |           | Sending once in the year. |              |           |   |   |                 |  |                       |
|                            | Lists.                          | Outworkers   |           | Lists.                    | Outworkers.  |           |   |   |                 |  |                       |
|                            |                                 | Con-tractors | Work-men. |                           | Con-tractors | Work-men. |   |   |                 |  |                       |
| Wearing Apparel—           |                                 |              |           |                           |              |           |   |   |                 |  |                       |
| (1) making, etc. ...       | 44                              | ...          | 97        | 9                         | ...          | 60        | 119   | 3   | 3               | 6  | —                     |
| (2) cleaning & washing ... | ...                             | ...          | ...       | ...                       | ...          | ...       | ...   | ...   | ...             | ...  | ...                   |

## 4.—REGISTERED WORKSHOPS.

| Workshops on the Register (S. 131) at the end of the Year. |     |     |     |     |     |     |     | Number. |
|--|-----|-----|-----|-----|-----|-----|-----|---------|
| Bakers ...   | ... | ... | ... | ... | ... | ... | ... | 221     |
| Bootmakers ...   | ... | ... | ... | ... | ... | ... | ... | 174     |
| Dressmakers and Milliners ...                              | ... | ... | ... | ... | ... | ... | ... | 239     |
| Laundries ...  | ... | ... | ... | ... | ... | ... | ... | 52      |
| Tailors ...  | ... | ... | ... | ... | ... | ... | ... | 115     |
| Miscellaneous ...  | ... | ... | ... | ... | ... | ... | ... | 642     |
| Total number of Workshops on Register ...                  |     |     |     |     |     |     |     | 1,443   |

## 5.—OTHER MATTERS.

| Class   | Number |
|---|--------|
| Matters notified to H.M. Inspector of Factories :—  |        |
| Failure to affix Abstract of the Factory and Workshop Act (Sec. 133) ...  | —      |
| Action taken in matters referred by H.M. Inspectors as remediable under the Public Health Acts but not under the Factory Act :— |        |
| Notified by H.M. Inspector ...  | 10     |
| Reports (of action taken) sent to H.M. Inspector ...  | 10     |
| Other (Notices of Occupation of Workshops received from H.M. Inspector) ...   | 50     |
| Underground Bakehouses in use at the end of the year ...  | 3      |

**SANITARY INSPECTION OF DISTRICT.**—The general sanitary inspection of the district, inspection of factories, and workshops, inspection of shops under the Shops Acts, inspection of seamen's and common lodging houses, the inspection of meat and other food in shops and stores, and the taking of samples for analysis under the Sale of Food and Drugs Acts, were carried out during the year 1917 by Mr. S. Evans, Chief Inspector of Nuisances, with the assistance of nine Assistant Inspectors.

For the purposes of inspection, the City is divided into six districts, as follows :—

|   |
|---|
| District No. 1.—Canton and Riverside Wards.                 |
| „ No. 2.—Splott Ward and part of Adamsdown Ward.            |
| „ No. 3.—Park Ward and part of Cathays Ward.                |
| „ No. 4.—Central Ward and parts of Cathays and South Wards. |
| „ No. 5.—Grangetown Ward and part of South Ward.            |
| „ No. 6.—Roath Ward and part of Adamsdown Ward.             |

The following statement, in addition to other tables in this report, shows the nature and extent of the work performed by the Chief Inspector and his Assistants.

**SUMMARY OF SANITARY INSPECTION OF DWELLING HOUSES, &C., DURING THE YEAR 1917 :—**

|  |     |     |     |     |        |
|--|-----|-----|-----|-----|--------|
| Complaints of Nuisances received                         | ... | ... | ... | ... | 889    |
| Houses, etc., inspected                                  | ... | ... | ... | ... | 5,216  |
| House-to-house inspections (including testing of drains) | ... | ... | ... | ... | 388    |
| Re-inspections of houses, etc.                           | ... | ... | ... | ... | 11,442 |
| Drains tested with smoke                                 | ... | ... | ... | ... | 79     |
| „ „ chemicals  | ... | ... | ... | ... | 432    |
| Notices served :—  |     |     |     |     |        |
| Informal   | ... | ... | ... | ... | 1,793  |
| Statutory  | ... | ... | ... | ... | 44     |
| Notices complied with :—                                 |     |     |     |     |        |
| Informal   | ... | ... | ... | ... | 1,689  |
| Statutory  | ... | ... | ... | ... | 44     |
| Towns Improvement Clauses Act, 1847 :—                   |     |     |     |     |        |
| Notices <i>re</i> defective shutters served              | ... | ... | ... | ... | 5      |
| „ „ „ complied with                                      | ... | ... | ... | ... | 14     |

In connection with the sanitary inspection of dwelling-houses, 3,210 sanitary defects were remedied, details of which are given below :—

|  |     |     |     |     |     |
|--|-----|-----|-----|-----|-----|
| Drains unchoked and repaired                                 | ... | ... | ... | ... | 481 |
| Soil pipes, ventilation shafts and fresh air inlets repaired | ... | ... | ... | ... | 18  |
| New W.C. pans provided                                       | ... | ... | ... | ... | 58  |
| New syphon traps provided                                    | ... | ... | ... | ... | 4   |
| New gully traps provided                                     | ... | ... | ... | ... | 2   |
| W.C.s repaired   | ... | ... | ... | ... | 19  |
| W.C.s cleansed   | ... | ... | ... | ... | 17  |
| Flushing apparatus provided                                  | ... | ... | ... | ... | 6   |
| „ „ repaired   | ... | ... | ... | ... | 55  |
| Trough outlets repaired                                      | ... | ... | ... | ... | 57  |
| Roofs repaired   | ... | ... | ... | ... | 615 |
| Shutters repaired  | ... | ... | ... | ... | 580 |
| Down-pipes repaired  | ... | ... | ... | ... | 90  |
| Chimneys repaired  | ... | ... | ... | ... | 40  |
| Inside plastering repaired                                   | ... | ... | ... | ... | 95  |
| Outside „ „  | ... | ... | ... | ... | 94  |
| Areas repaired   | ... | ... | ... | ... | 22  |
| Yard surfaces repaired                                       | ... | ... | ... | ... | 124 |
| Yards, etc., cleansed  | ... | ... | ... | ... | 2   |

|                                   |     |     |     |     |     |
|-----------------------------------|-----|-----|-----|-----|-----|
| Outhouses cleansed or repaired    | ... | ... | ... | ... | 3   |
| Accumulations removed             | ... | ... | ... | ... | 76  |
| Manure receptacles provided       | ... | ... | ... | ... | 1   |
| "    "    repaired                | ... | ... | ... | ... | 3   |
| Boundary and party walls repaired | ... | ... | ... | ... | 11  |
| Doors repaired                    | ... | ... | ... | ... | 60  |
| Floors repaired                   | ... | ... | ... | ... | 149 |
| Windows repaired                  | ... | ... | ... | ... | 156 |
| Ceilings repaired                 | ... | ... | ... | ... | 60  |
| Houses, bedding, etc., cleansed   | ... | ... | ... | ... | 41  |
| Ventilation improved              | ... | ... | ... | ... | 3   |
| Water supply provided             | ... | ... | ... | ... | 92  |
| Overcrowding abated               | ... | ... | ... | ... | 20  |
| Other Nuisances abated            | ... | ... | ... | ... | 156 |

Particulars as to the inspection of premises periodically inspected during the year 1917 are herewith given :—

#### OFFENSIVE TRADES :—

|                       |     |     |     |     |     |
|-----------------------|-----|-----|-----|-----|-----|
| Number on Register    | ... | ... | ... | ... | 41  |
| Inspections           | ... | ... | ... | ... | 211 |
| Notices served        | ... | ... | ... | ... | 2   |
| Notices complied with | ... | ... | ... | ... | 2   |

#### DAIRIES, COWSHEDS AND MILKSHOPS :—

|                         |     |     |     |     |       |
|-------------------------|-----|-----|-----|-----|-------|
| Milkshops on Register   | ... | ... | ... | ... | 405   |
| Cowsheds on Register    | ... | ... | ... | ... | 8     |
| Inspection of milkshops | ... | ... | ... | ... | 1,758 |
| "    cowsheds           | ... | ... | ... | ... | 73    |
| Notices served          | ... | ... | ... | ... | 34    |
| Notices complied with   | ... | ... | ... | ... | 30    |

#### SHOPS, STORES, &C. :—

|                                |     |     |     |     |     |
|--------------------------------|-----|-----|-----|-----|-----|
| Inspections of butchers' shops | ... | ... | ... | ... | 875 |
| "    provision shops           | ... | ... | ... | ... | 224 |
| "    markets                   | ... | ... | ... | ... | 656 |
| "    wholesale stores          | ... | ... | ... | ... | 964 |
| "    fish and fruit shops      | ... | ... | ... | ... | 908 |
| "    storage premises          | ... | ... | ... | ... | 189 |
| "    army stores               | ... | ... | ... | ... | —   |
| Other Inspections              | ... | ... | ... | ... | 242 |

#### MISCELLANEOUS INSPECTIONS :—

|                                    |     |     |     |     |     |
|------------------------------------|-----|-----|-----|-----|-----|
| Public Houses                      | ... | ... | ... | ... | 97  |
| Notices served                     | ... | ... | ... | ... | 11  |
| Notices complied with              | ... | ... | ... | ... | 9   |
| Theatres, etc.                     | ... | ... | ... | ... | 5   |
| Notices served                     | ... | ... | ... | ... | —   |
| Notices complied with              | ... | ... | ... | ... | —   |
| Fried-fish Shops                   | ... | ... | ... | ... | 300 |
| Notices served                     | ... | ... | ... | ... | 16  |
| Notices complied with              | ... | ... | ... | ... | 13  |
| Ice-cream Shops                    | ... | ... | ... | ... | —   |
| Notices served                     | ... | ... | ... | ... | —   |
| Notices complied with              | ... | ... | ... | ... | —   |
| Inspections of Urinals             | ... | ... | ... | ... | 37  |
| Visits to owners <i>re</i> notices | ... | ... | ... | ... | 384 |

## COMMON LODGING HOUSES :—

|                                   |     |     |     |       |
|-----------------------------------|-----|-----|-----|-------|
| Common Lodging Houses on Register | ... | ... | ... | 19    |
| Day Inspections                   | ... | ... | ... | 1,176 |
| Night Inspections                 | ... | ... | ... | —     |
| Notices served                    | ... | ... | ... | 68    |
| Notices complied with             | ... | ... | ... | 67    |

## SEAMEN'S LODGING HOUSES :—

|   |     |     |     |       |
|---|-----|-----|-----|-------|
| Seamen's Lodging Houses on Register                         | ... | ... | ... | 177   |
| Licences granted  | ... | ... | ... | 232   |
| Licences relinquished                                       | ... | ... | ... | 55    |
| Day Inspections   | ... | ... | ... | 4,760 |
| Night Inspections   | ... | ... | ... | 4     |
| Notices served under Byelaws                                | ... | ... | ... | 153   |
| Notices under Byelaws complied with                         | ... | ... | ... | 155   |
| Notices served under Public Health Acts                     | ... | ... | ... | 32    |
| Notices under Public Health Acts complied with              | ... | ... | ... | 38    |
| Persons cautioned for lodging seamen without being licensed | ... | ... | ... | 32    |
| Legal proceedings for lodging seamen without being licensed | ... | ... | ... | 1     |

I have the honour to be,

My Lord Mayor and Gentlemen,

Your obedient Servant,

EDWARD WALFORD,

*Medical Officer of Health.*